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Tanya Parker  
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Tanya Parker  
(Signature of Person Mailing Paper or Fee)

**PATENT APPLICATION**  
**Attorney Docket No. NMTC-0771**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of	)	
	)	
Kevin D. MacLean et al.	)	Group Art Unit: 2825
	)	
<b>U.S. Patent No.: 6,795,955 B2</b>	)	
<b>Issued: September 21, 2004</b>	)	
	)	
Application No.: 10/098,713	)	Examiner: Kik, Phallaka
Filed: March 15, 2002	)	<b>Certificate</b>
	)	OCT 15 2004
For: <b>METHOD AND APPARATUS FOR</b>	)	
<b>IDENTIFYING AN IDENTICAL</b>	)	<b>of Correction</b>
<b>CELL IN AN IC LAYOUT WITH</b>	)	
<b>AN EXISTING SOLUTION</b>	)	

**REQUEST FOR CERTIFICATE OF CORRECTION**

Certificate of Correction Branch of the Publishing Division  
Assistant Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

We hereby request that the above-referenced U.S Patent be corrected in the following way.

Please add the following 93 prior art references to the front page of the application. In the office action mailed February 26, 2004, the Examiner signed form 1449s for 73 IDS references filed December 2, 2002. The Examiner also cited 20 additional references. (See attached sheets.) None of these references were printed in the issued patent. Please include them in the issued patent.

In claim 8 (at column 9, line 24), please delete the words,

“the gcomplete” and replace with the words **--a complete--**

In claim 10 (at column 9, line 31), please delete the number,

“8” and replace with the number **--7--**

In claim 20 (at column 10, line 51), please delete the word,

“tantet” and replace with the word **--target--**

In claim 20 (at column 10, line 54), please delete the word,

“precedina” and replace with the word **--preceding--**

In claim 21 (at column 11, line 3), please delete the word,

“wherin” and replace with the word **--wherein--**

Please refer to enclosed PTO form PTO/SB/44.

A. Richard Park  
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Respectfully submitted,

By



A. Richard Park  
Registration No. 41,241

Date: October 4, 2004

(Also Form PTO-1050)

## UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO : 6,795,955 B2

DATED : September 21, 2004

INVENTOR(S): Kevin D. MacLean and Roger W. Sturgeon

It is certified that an error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

“IDS filed February 20, 2004 and mailed with Office Action dated February 26, 2004 was scanned and references were not printed on the Issued Patent, please add:

In claim 8 (at column 9, line 24), please delete the words,

“the gcomplete” and replace with the words --a complete--

In claim 10 (at column 9, line 31), please delete the number,

“8” and replace with the number --7--

In claim 20 (at column 10, line 51), please delete the word,

“tantet” and replace with the word --target--

In claim 20 (at column 10, line 54), please delete the word,

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In claim 21 (at column 11, line 3), please delete the word,

“wherin” and replace with the word --wherein--

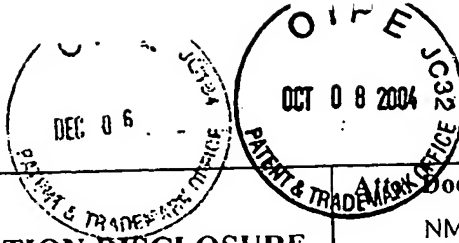
## MAILING ADDRESS OF SENDER:

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508 Second Street, Suite 201  
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PATENT NO: 6,795,955 B2

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18 OCT 2004



#3

<b>INFORMATION DISCLOSURE CITATION</b>  <b>PTO-1449</b>		<b>Docket No.</b> NMTC-0771	<b>Serial No.</b> 10/098,713
		<b>Applicant</b> MACLEAN, Kevin	
		<b>Filing Date</b> 3/15/2002	<b>Group</b> 2825
<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>			
<b>EXAMINER'S INITIALS</b>	<b>CITATION</b>		
	Cobb, N., et al., "Fast, Low-Complexity Mask Design", SPIE, Vol. 2440, pp. 313-327, February 22-24, 1995.		
	Cobb, N., et al., "Experimental Results on Optical Proximity Correction With Variable Threshold Resist Model", SPIE, Vol. 3051, pp. 458-468, March 12-14, 1997.		
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	Toublan, O., et al., "Phase Aware Proximity Correction for Advanced Masks", SPIE, Vol. 4000, pp. 160-170, March 1-3, 2000.		
	Anonymous, "Parameterization For Full Shape And Rule Dependent Dissection", IPCOM000009587D, September 4, 2002 (9 pages).		

EXAMINER: Shallaka Kike

Date Considered: 2/20/2004

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP § 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

NTI Use Only: 771, 744, 1



#3

SHEET 2 of 2

<b>INFORMATION DISCLOSURE CITATION</b>  <b>PTO-1449</b>	<b>Docket No.</b> NMTC-0771	<b>Serial No.</b> 10/098,713
	<b>Applicant</b> MACLEAN, Kevin	
	<b>Filing Date</b> 3/15/2002	<b>Group</b> 2825

**U.S. PATENT DOCUMENTS**

EXAMINER'S INITIALS	PATENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
<i>PR</i>	6,014,456	1/11/2000	Tsudaka	382	144	7/15/1996
<i>PR</i>	6,154,563	11/28/2000	Tsudaka	382	144	12/17/1998
<i>PR</i>	6,298,473 B1	10/2/2001	Ono, et al.	716	21	12/3/1998
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<i>PR</i>	2002/0152454 A1	10/17/2002	Cote, et al.	716	21	6/7/2002

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Date Considered:

*2/20/2004*

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INFORMATION DISCLOSURE  
CITATION

PTO-1449

Atty. Docket No.  
NMTC-0771

Serial No.  
10/098,713

Applicant  
MACLEAN, Kevin

Filing Date  
3/15/2002

Group  
2818-2825

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EXAMINER'S INITIALS	PATENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
<i>RE</i>	5,182,718	1/26/1993	Harafuji, et al.	364	490	3/29/1990
<i>RE</i>	5,432,714	7/11/1995	Chung, et al.	364	525	9/2/1994
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EXAMINER: *Shallaka Kik*

Date Considered: *2/20/2004*

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SHEET 2 of 4INFORMATION DISCLOSURE  
CITATION

PTO-1449

Atty. Docket No.  
NMTC-0771Serial No.  
10/098.713Applicant  
MACLEAN, KevinFiling Date  
3/15/2002Group  
2818 2825

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER'S INITIALS	CITATION
<i>PD</i>	Ackmann, P., et al., "Phase Shifting and Optical Proximity Corrections to Improve CD Control on Logic Devices in Manufacturing for Sub 0.35 um 1-Line", SPIE, Vol. 3051, pp. 146-153, March 12-14, 1997.
<i>PD</i>	Lithas, "Lithas: Optical Proximity Correction Software" (2 pages). <b>NO DATE.</b>
<i>PD</i>	Precim, "Proxima System", Precim Company, Portland, Oregon (2 pages). <b>NO DATE.</b>
<i>PD</i>	Precim, "Proxima Wafer Proximity Correction System", Precim Company, Portland, Oregon (2 pages). <b>NO DATE.</b>
<i>PD</i>	Rieger, M., et al., "Mask Fabrication Rules for Proximity-Corrected Patterns", Precim Company, Portland, Oregon (10 pages). <b>NO DATE</b>
<i>PD</i>	Rieger, M., et al., "Using Behavior Modeling for Proximity Correction", Precim Company, Portland, Oregon (6 pages), <b>1994.</b>
<i>PD</i>	Cobb, et al., "Fast Sparse Aerial Image Calculation for OPC", SPIE, Vol. 2621, pp. 534-544, September 20-22, 1995.
<i>PD</i>	Lucas, K., et al., "Model Based OPC for 1st Generation 193nm Lithography", Motorola Inc., IDT assignee to IMEC (12 pages). <b>NO DATE.</b>
<i>PD</i>	Stimman, J., et al., "Quantifying Proximity and Related Effects in Advanced Wafer Processes", Precim Company, Hewlett Packard Labs (9 pages). <b>NO DATE.</b>
<i>PD</i>	Sugawara, M., et al., "Practical Evaluation of Optical Proximity Effect Correction by EDM Methodology", Sony Corporation (11 pages).
<i>PD</i>	Saleh, B., et al., "Reduction of Errors of Microphotographic Reproductions by Optimal Corrections of Original Masks", Optical Engineering, Vol. 20, No. 5, pp. 781-784, September/October 1981.
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<i>PD</i>	Harafuji, K., et al., "A Novel Hierarchical Approach for Proximity Effect Correction in Electron Beam Lithography", IEEE, Vol. 12, No. 10, pp. 1508-1514, October 1993.
<i>PD</i>	Rieger, M., et al., "System for Lithography Proximity Compensation", Precim Company, Portland, Oregon, September 1993 (28 pages).

EXAMINER: Shallaka WileDate Considered: 09/08/2004

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP § 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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SHEET 3 of 4INFORMATION DISCLOSURE  
CITATION

PTO-1449

Atty. Docket No.

NMTC-0771

Serial No.

10/098.713

Applicant

MACLEAN, Kevin

Filing Date

3/15/2002

Group

~~2818~~ 2825

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER'S INITIALS	CITATION
	Galan, G., et al., "Application of Alternating-Type Phase Shift Mask to Polysilicon Level for Random Logic Circuits", Jpn. J. Appl. Phys., Vol. 33, pp. 6779-6784 (1994).
	Stirniman, J., et al., "Fast Proximity Correction with Zone Sampling", SPIE, Vol. 2197, pp. 294-301 (1994).
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	Yen, A., et al., "Characterization and Correction of Optical Proximity Effects in Deep-Ultraviolet Lithography Using Behavior Modeling", J. Vac. Sci. Technol. B, Vol. 14, No. 6, pp. 4175-4178, November/December 1996.
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	Yamamoto, K., et al., "Hierarchical Processing of Levenson-Type Phase Shifter Generation", Jpn. J. Appl. Phys., Vol. 36, Part 1, No. 12B, pp. 7499-7503, December 1997.
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	Asai, N., et al., "Proposal for the Coma Aberration Dependent Overlay Error Compensation Technology", Jpn. J. Appl. Phys., Vol. 37, pp. 6718-6722 (1998), Dec. 1998.

EXAMINER: Shallaka WikeDate Considered: 2/22/2004

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP § 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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SHEET 4 of 4INFORMATION DISCLOSURE  
CITATION

PTO-1449

Atty. Docket No.  
NMTC-0771Serial No.  
10/098.713Applicant  
MACLEAN, KevinFiling Date  
3/15/2002Group  
2818 2825

## FOREIGN PATENT DOCUMENTS

EXAMINER'S INITIALS	PATENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
<i>PD</i>	JP 3-80525	4/5/1991	JP	H01L	21/27	<input type="checkbox"/>	<input type="checkbox"/>
<i>PD</i>	WO 00/67074 A1	11/9/2000	WO	G03F	7/20	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>PD</i>	WO 02/29491 A1	4/11/2002	WO	G03F	11/4	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>PD</i>	GB 2,324,169 A	10/14/1998	GB	G03F	4/14	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>PD</i>	WO 97/38381	10/16/1997	WO	G06F	17/50	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>PD</i>	WO 99/14636 A1	3/25/1999	WO	G03F	9/00	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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EXAMINER: *Shallaker Mike*Date Considered: *2/20/2004*

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NTI Use Only: 771; 158; 1

18 OCT 2004



# **Notice of References Cited**

Application/Control No.

10/098,713

Applicant(s)/Patent Under

Reexamination

MACLEAN ET AL.

Examiner

Phallaka Kik

Art Unit

2825

Page 1 of 2

## **U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-5,696,693 ✓	12-1997	Aubel et al.	716/8
	B	US-2002/0152449 ✓	10-2002	Lin, Chin-hsen	716/17
	C	US-6,292,925 ✓	09-2001	Dellinger et al.	716/8
	D	US-2003/0088837 ✓	05-2003	Pierrat et al.	716/4
	E	US-2003/0068564 ✓	04-2003	Liu et al.	430/5
	F	US-6,473,881 ✓	10-2002	Lehner et al.	716/2
	G	US-2002/0048708 ✓	04-2002	Chen et al.	430/5
	H	US-6,668,367 ✓	12-2003	Cobb et al.	716/19
	I	US-6,532,585 ✓	03-2003	Petranovic et al.	716/19
	J	US-6,499,003 ✓	12-2002	Jones et al.	703/6
	K	US-6,691,296 ✓	02-2004	Nakayama et al.	716/15
	L	US-2002/0188918 ✓	12-2002	Cirit, Mehmet A.	716/9
	M	US-6,397,169 ✓	05-2002	Shenoy et al.	703/14

## **FOREIGN PATENT DOCUMENTS**

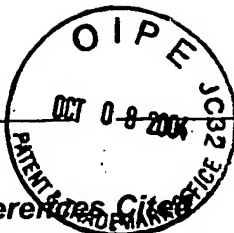
*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
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	Q					
	R					
	S					
	T					

## **NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
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	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

18 OCT 2004

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MACLEAN ET AL.

Examiner

Phallaka Kik

Art Unit

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Page 2 of 2

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-6,327,694 ✓	12-2001	Kanazawa, Yuzi	716/7
	B	US-6,243,851 ✓	06-2001	Hwang et al.	716/10
	C	US-6,571,374 ✓	05-2003	Runyon et al.	716/5
	D	US-6,523,162 ✓	02-2003	Agrawal et al.	716/19
	E	US-6,230,299 ✓	05-2001	McSherry et al.	716/1
	F	US-5,867,396 ✓	02-1999	Parlour, David B.	716/18
	G	US-5,448,493 ✓	09-1995	Topolewski et al.	716/7
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

**FOREIGN PATENT DOCUMENTS**

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	N					
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	S					
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	X	

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Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

OCT 8 2004